## CLAIMS

## What is claimed is:

- 1. A computer code upgrading method for use with a memory module for upgrading a set of embedded computer code and its related settings data in the memory module;
- the computer code upgrade method comprising:

  duplicating a copy of the settings data;

  erasing all the computer code and settings data in the memory module;

  writing a new version of computer code into the memory module; and

  writing the duplicated copy of settings data into the memory module.
- 10 2. The computer code upgrading method of claim 1, wherein the memory module is a server's internal erasable programmable memory module.
  - 3. The computer code upgrading method of claim 1, wherein the computer code stored in the memory module is an embedded operating system.
- 4. A computer code upgrading system for use with a memory module for upgrading aset of embedded computer code and its related settings data in the memory module;

the computer code upgrade system comprising:

- a first storage module for storing a new version of computer code;
- a second storage module for storing a duplicated copy of the old settings data in the memory module;
- a settings data duplicating module for duplicating a copy of the old settings data in the memory module and storing the duplicated copy of old settings data in the second storage module; and

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- a programming module, which is capable of erasing all the computer code and settings data in the memory module, and then writing the new version of computer code stored in the first storage module as well as the duplicated copy of settings data stored in the second storage module into the memory module.
- 5 5. The computer code upgrading system of claim 5, wherein the memory module is a server's internal erasable programmable memory module.
  - 6. The computer code upgrading system of claim 5, wherein the computer code stored in the memory module is an embedded operating system.
- 7. The computer code upgrading system of claim 5, wherein the second storage mod-10 ule is a RAM module.
  - 8. A computer code upgrading system for use with a memory module for upgrading an embedded operating system and its related settings data in the memory module;

the computer code upgrade system comprising:

- a first storage module for storing a new version of embedded operating system;
- a second storage module for storing a duplicated copy of the old settings data in the memory module;
  - a settings data duplicating module for duplicating a copy of the old settings data in the memory module and storing the duplicated copy of old settings data in the second storage module; and
- a programming module, which is capable of erasing the old version of embedded operating system and settings data in the memory module, and then writing the new version

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of embedded operating system stored in the first storage module as well as the duplicated copy of settings data stored in the second storage module into the memory module.

- 9. The computer code upgrading system of claim 5, wherein the memory module is a server's internal erasable programmable memory module.
- 5 10. The computer code upgrading system of claim 5, wherein the second storage module is a RAM module.